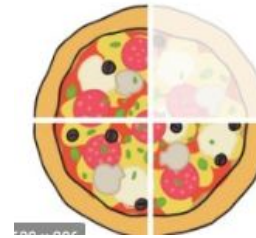**Year 4 Maths 20.05.20**
Steppingstone activity
LO: To find a fraction of a quantity
Success Criteria:

1. Make a bar model of your fraction
2. DIvide the model/whole number by the denominator
3. Multiply by the numerator (Shade the model)
4. Write your answer

Model

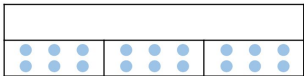**Numerator**
How many equal parts do you have?

$\frac{3}{4}$

Denominator
How many equal parts is the whole divided into?

1.   2.   3.   4.

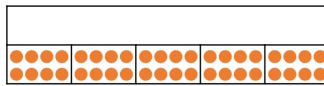**Now you try… Make equivalent fraction of the one below**

1a. Rosie is finding fractions of an amount. She knows that $\frac{1}{3}$ of her number is 6.
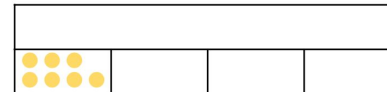
Use the bar model to find the whole.

18

1b. Jake is finding fractions of an amount. He knows that $\frac{1}{5}$ of her number is 8.
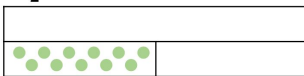
Use the bar model to find the whole.

40

2a. $\frac{1}{4}$ of a number is 7.

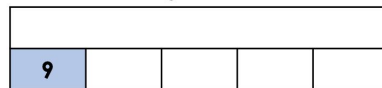Complete the bar model to find the whole.

28

2b. $\frac{1}{2}$ of a number is 11.
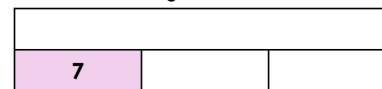
Complete the bar model to find the whole.

22

3a. Anna knows $\frac{1}{5}$ of a number is 9.

$\frac{1}{5}$ of $\boxed{45}$ = $\boxed{9}$

3b. Ellan knows $\frac{1}{3}$ of a number is 7.

$\frac{1}{3}$ of $\boxed{21}$ = $\boxed{7}$
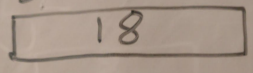
Year 4 Maths

Lesson 20.05.20

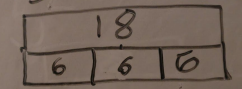## LO: To find a fraction of a quantity

Success Criteria:

1.	Make a bar model of you fraction
2.	DIvide the model/whole number by the denominator
3.	Multiply by the numerator (Shade the model)
4.	Write your answer

Model:

1.   2.   3.   4.
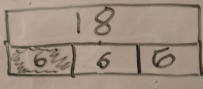
Numerator
How many equal parts do you have?

$$\frac{3}{4}$$

Denominator
How many equal parts is the whole divided into?

Year 4 Maths Main activity

Complete at least 2 columns, more if you can!

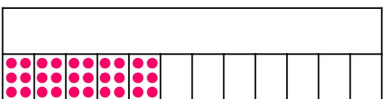| Task 1	Task 2

CANONBURY
PRIMARY SCHOOL
Create, discover and succeed together
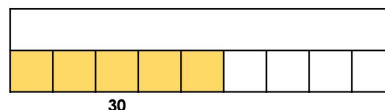
Practice: Use the bar model to find the whole

Marco is finding fractions of an amount. He knows that 5/8 of his number is 20.   **32**
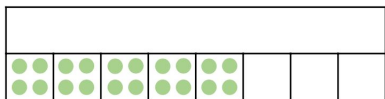
Millie is finding fractions of an amount. She knows that 5/12 of his number is 30.   **72**

Georgie knows 5/9 of a number is 30.

$\frac{5}{9}$ of **54** = **30**

30

Benny knows 4 of a number is 12.

$\frac{4}{11}$ of **33** = **12**

12

5. 1/4 of 44 = **11**

6. 1/10 of 90 = **9**

7. 3/5 of 15 = **9**

8. 7/10 of 50 = **35**

Extension

8a. George has a packet of sweets.
He has eaten $\frac{4}{9}$ of the packet.
He has eaten 16 sweets.
How many sweets were in the packet before George started eating them?

36 sweets

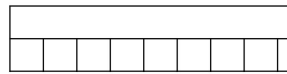**Practice: Use the bar model to find the whole**

Pippa is finding fractions of an amount. She knows that 2/14 of her number is 6.   **21**

Dylan is finding fractions of an amount. He knows that 4/16 of his number is 10.   **40**

Philip knows 6/9 of a number is 72.

4/9 of 108 is 48

Alice knows 10/15 of a number is 30.
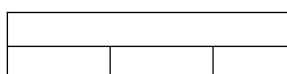
$\frac{9}{15}$ of **45** = **27**

5. 4/5 of 80 = **64**

6. 3/5 of 85 = **51**

7. 6/10 of 90 = **54**

8. 3/8 of 96 = **36**

Extension

12a. Leo and Liz are eating chocolates.
Leo has eaten $\frac{1}{4}$ of the box.
Liz has eaten $\frac{3}{8}$ of the box.
If Leo has eaten 10 chocolates, how many did Liz eat?
How many chocolates were in the box before they were opened?
12a. Leo has eaten 15 chocolates. There were 40 chocolates to begin with.

Task 3

CANONBURY
PRIMARY SCHOOL
Create, discover and succeed together

Reasoning
Explain your answers.

4a. Margot completes the following calculation in her book but she has made a mistake.

> If $\frac{2}{9}$ is 18, then the whole is 36.

Find the mistake that she has made.

Draw a bar model to prove your answer.

4a. **Margot has multiplied 18 by 2 instead of dividing by 2 and multiplying by 9. The whole should be 81.**

8a. Nathaniel is calculating a whole number from a fraction.

He says,

> I know $\frac{6}{9}$ of a number is 12. To find the whole I can divide by 2 and multiply by 3.

Is he correct? Explain how you know.

8a. **Nathaniel is correct because $\frac{6}{9}$ is equivalent to $\frac{2}{3}$.**

Task 4

Problem solving

1. Use the dominoes to create a continuous loop by matching whole numbers to the correct representation or calculation.

The sequence can be completed as follows, with any domino as the starting point.

$\frac{4}{12}$ of ? = 16

$\frac{3}{8}$ of ? = 24

$\frac{3}{5}$ of ? = 15 | 10 10 10 / 10 10 10

48 / ? 21

= 35 | 10 10 10 / 1 10 10 / 1 10 10

35 | ? 54

66 | = 54

10 10 10 / 10 10 10 / 10 10 1 | $\frac{6}{8}$ of ? = 54